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EXAMINER

MADAMBA, GLENFORD J

ART UNIT PAPER NUMBER

2151

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/777,655

Applicant(s)

JEON, YOUNG JAE

Examiner

Glenford Madamba

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                       |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                      | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Response to Remarks***

1. This action is in response to remarks filed by Applicant's representative on August 18, 2006.
2. Applicant's remarks submitted on August 18, 2006 have been considered but are now moot in light of the new grounds of rejection submitted with this action.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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2. Claims 1, 3, 4-6, 9, 12, 15, 18-23, 25-26, and 28-29, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Smyers, U.S. Patent US 6,430, 629.

3. As per Claims 1, 9, and 15, Smyers discloses a home network system [Abstract] [Figure 1] comprising:

at least one slave device (110-140) [Fig. 1]; and

a master device 31-36 (e.g., home network monitor\_10) [Fig. 1] operatively connected to the *at least one* slave device, the master device comprising:

a microprocessor (CPU\_20) [Fig. 1] operatively connected to the *at least one* slave device for repeatedly sending a status request signal to the slave device and receiving one or more response signals from the *at least one* slave device [Abstract] [col 2, L9-12];

a memory coupled to the microprocessor (30 /40) [Figure 1] for constructing an operation history database (e.g. log of nodal operation state or state changes) [col 2, L47 – col 3, L7] by *cumulatively* storing operation status data (e.g. temperature readings, VCR program recordings) of the *at least one* slave device included in each response signal [col 1, L5-30] [col 2, L47 – col 3, L7], wherein the microprocessor extracts data from the operation history database when a history inquiry request is received from a user [col 3, L1-20]; and

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a display unit (User Interface\_160 w/ touchscreen; e.g., computer, PDA) coupled to the microprocessor for displaying the extracted operation history data [Figure 1]

wherein the operation status data includes data related to specific functions performed by the at least one slave device (e.g. temperature readings, VCR program recordings) [Abstract] [col 1, L5-30] [col 2, L47 – col 3, L7].

Claim 9 and 15 are also thus rejected using the same rationale discussed above for Claim 1 as the claims differ only by their statutory category.

4. As per Claim 3, Smyers discloses the home network system of claim 1, wherein the displayed operation history data includes a list of operations or events performed by *the* slave device during a predetermined period of time (e.g. monitoring of temperature readings every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47]

5. As per Claim 4, Smyers discloses the home network system of claim 1, wherein the history inquiry request received from the user *includes a user selection of a period of time*, and the displayed operation history data includes a list of operations or events performed by *each of the at least one slave device* during the selected period of time (e.g. monitoring of temperature readings by a temperature sensitive device every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47].

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6. As per Claims 5, 19, and 20 Smyers discloses the home network system of claim 1, wherein the operation status data included in each response signal includes information indicating initiation or completion of an operation and a corresponding time of the initiation or completion [col 2, L48-55].

Claims 19, and 20 are also rejected using the same justification provided for Claim 5 as they cite the same claim limitations as Claim 5.

7. As per Claim 6, Smyers discloses the home network system of claim 1, wherein the master device is any one of a television (TV) receiver , a refrigerator having a display panel, a personal computer (PC), and a personal data assistant (PDA) device [col 3, L14-19].

8. As per Claim 12, 22 and 23, Smyers discloses the television (TV) receiver of claim 9, wherein the history inquiry request received from the user includes *a user selection of at least one slave device*, and the displayed operation history data includes a list of operations or events performed *by each selected slave device* during a predetermined period of time (e.g. monitoring of temperature readings by a temperature sensitive device every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47].

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9. As per Claim 18, Smyers discloses the method of claim 15, wherein the operation status data included in each response signal includes data indicating a current operation status of a slave device [Abstract] [col 1, L5-28].

10. As per Claim 21, Smyers discloses the method of claim 15, wherein the operation status data included in each response signal includes information indicating that there is no operation in progress [col 2, lines 47-65].

11. As per Claim 25, Smyers discloses the method of claim 15, wherein the user manually makes the history inquiry request by activating a corresponding function key provided within the master device [col 3, L8-20].

12. As per Claim 26, Smyers discloses the method of claim 15, wherein sending one status request signals to the plurality of slave devices is performed repeatedly (e.g. monitoring of temperature readings by a temperature sensitive device every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47].

13. As per Claims 28, 29, and 31 Smyers discloses the home network system of claim 1, wherein the at least one slave device is configured to respond to the status request signal from the master device by sending to the master device the response signal that indicates that the at least one slave device is idle (VCR 'recording', 'not recording', recording completed') [Abstract] [col 1, L5-28] [col 2, L48-55].

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 11, 13, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyers in view of Dara-Abrams et al (hereinafter Dara-Abrams), U.S. Patent 6826512.

3. As per Claims 2 and 16, Smyers in view of Dara-Abrams discloses the home network system of claim 1, wherein the microprocessor identifies the at least one slave device by checking *an identification (ID) of the at least one slave device*.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract], he does not expressly disclose the feature of the system wherein the microprocessor identifies the at least one slave device by checking *an identification (ID) of the at least one slave device*. The feature is disclosed by Dara-Abrams in a related endeavor.



Dara-Abrams discloses as his invention a method and apparatus for diagnosing consumer electronic devices (PCs, TVs, PVRs, STBs, DVRs, PDAs, game devices, etc.) [Abstract] [col 1, L14-22] [col 2, L35-36]. In one embodiment, when a problem with a consumer device owned by a user is identified, a diagnostic procedure is provided to control the diagnosis of the potentially faulty consumer electronic device by a testing consumer electronic device. In particular, Dara-Abrams discloses as part of his invention that upon receiving a request for a support service application, server\_22 selects the requested service application from the database\_24 using *device identifying information* (e.g. the vendor, model number and serial number of the device) included in the request [col 3, L46-50].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyer's invention with the feature of the system wherein the microprocessor identifies the at least one slave device by checking *an identification (ID) of the at least one slave device*, as disclosed by Dara-Abrams, for the motivation of providing a mechanism for diagnosing consumer electronic devices locally, thus eliminating a need to find a service center associated with the faulty device [col 1, L42-45].

4. As per Claims 11 and 17, Smyers in view of Dara-Abrams discloses the television (TV) receiver of claim 9, wherein the displayed operation history data includes a list of

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operations or events performed by one or more of the plurality of *slave devices* during a predetermined period of time.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose the feature of the television (TV) receiver. The feature is disclosed by Dara-Abrams in a related endeavor.

Dara-Abrams discloses as his invention a method and apparatus for diagnosing consumer electronic devices (PCs, TVs, PVRs, STBs, DVRs, PDAs, game devices, etc.) [Abstract] [col 1, L14-22] [col 2, L35-36]. In one embodiment, when a problem with a consumer device owned by a user is identified, a diagnostic procedure is provided to control the diagnosis of the potentially faulty consumer electronic device by a testing consumer electronic device. In particular, Dara-Abrams discloses as part of his invention gateway device<sub>14</sub> (e.g., PC, laptop, PDA, etc.), which may be coupled to a display device<sub>42</sub>, such as a television [col 3, L51-60].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyer's invention with the feature of the television (TV) receiver, as disclosed by Dara-Abrams, for the motivation of providing a mechanism for diagnosing consumer electronic devices locally, thus eliminating a need to find a service center associated with the faulty device [col 1, L42-45].

Claim 17 is also rejected using the same justification provided for Claim 11 as they cite the same claim limitations.

5. As per Claim 13, Smyers in view of Dara-Abrams discloses the television (TV) receiver of claim 9, wherein the history inquiry request received from the user includes a *user selection of a period of time*, and the displayed operation history data includes a list of operations or events performed *by each slave device* during the selected period of time.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose the feature of the television (TV) receiver. The feature is disclosed by Dara-Abrams in a related endeavor.

Dara-Abrams discloses as his invention a method and apparatus for diagnosing consumer electronic devices (PCs, TVs, PVRs, STBs, DVRs, PDAs, game devices, etc.) [Abstract] [col 1, L14-22] [col 2, L35-36]. In one embodiment, when a problem with a consumer device owned by a user is identified, a diagnostic procedure is provided to control the diagnosis of the potentially faulty consumer electronic device by a testing consumer electronic device. In particular, Dara-Abrams discloses as part of his

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invention gateway device\_14 (e.g., PC, laptop, PDA, etc.), which may be coupled to a display device\_42, such as a television [col 3, L51-60].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyer's invention with the feature of the television (TV) receiver, as disclosed by Dara-Abrams, for the motivation of providing a mechanism for diagnosing consumer electronic devices locally, thus eliminating a need to find a service center associated with the faulty device [col 1, L42-45].

Claim 13 is also rejected using the citations and reasoning provided above for claim 12 as the limitation of the history inquiry request received from the user including *a user selection of at least one slave device*, and the displayed operation history data including a list of operations or events performed *by each selected slave device* during a predetermined period of time, is disclosed by Smyers (e.g. monitoring of temperature readings by a temperature sensitive device every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47]

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6. Claims 7, 14, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyers in view of Klosterman et al (hereinafter Klosterman), U.S. Patent Publication US 200/0092017A1.

7. As per Claim 7, Smyers in view of Klosterman discloses the home network system of claim 1, wherein the master device includes a capability to activate a message BLOCK function which prevents messages sent from the at least on slave device from being displayed, and

wherein the memory *cumulatively* stores the operation status data included in each response signal, regardless of whether a message BLOCK function of the master device is currently activated or not.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose wherein the master device includes a capability to activate a message BLOCK function which prevents messages sent from the at least on slave device from being displayed, and wherein the memory *cumulatively* stores the operation status data included in each response signal, regardless of whether a message BLOCK function of the master device is currently activated or not.

This limitation is taught by Klosterman in his invention relating to television systems, and in particular, to the interception of television programming signals tuned by a television and the replacement or overlay of said tuned television programming signals with alternative video and/or audio programming and/or with graphics and/or text [0002]. In particular, Klosterman discloses an audio blocking bit (ABB) or video blocking bit (VBB) wherein a user may activate an electronic program guide. The EPG checks the VBB of the channel table entry of the channel currently tuned, and in one embodiment, if the VBB channel is set "on" then the EPG display is adjusted to completely cover the screen, and the show being viewed or displayed is completely blocked out [0061] [Figs. 2a-b, 3, 4a-b]. It is noted here by the Examiner that Klosterman's disclosures allows television programming signals to be received or stored in the receiver device while the display of the signal is blocked from view or replaced with alternative graphics and/or text.

It would therefore be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyers' invention, with the feature of a master device that includes a capability to activate a message BLOCK function which prevents messages sent from the at least on slave device from being displayed, and wherein the memory *cumulatively* stores the operation status data included in each response signal, regardless of whether a message BLOCK function of the master device is currently activated or not, as disclosed by Klosterman, for the motivation of blocking out

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undesired or unwanted television signal programs (i.e., commercials and advertisements) according to viewer preferences [0003-0006].

Claims 14 and 27 are also rejected using the same rationale for Claim 7 given that they are identical claims that differ only by statutory category.

8. Claims 8, 10, 24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyers in view of Aizu et al (hereinafter Aizu), U.S. Patent US 6,838,978.

9. As per Claims 8 and 10, Smyers in view of Aizu notes the home network system of claim 1, wherein the microprocessor and the at least one slave device are connected together through Power Line Communication (PLC) modems.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose wherein the microprocessor and the at least one slave device are connected together through Power Line Communication (PLC) modems 1 (Aizu: Figure 1; Col 5, lines 38-42).

The limitation is taught by Aizu in his invention of a communication system (e.g. home network system) using an electric power line and particularly relates to data collecting technology on electric household appliances in electric power line

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communications (PLC) at home [Abstract] [col 1, lines 5-10] [col 1, lines 46-52]. In particular, Aizu discloses a microprocessor and a plurality of slave devices connected via a Power Line communication modem (i.e. Controller 1, which may be a PLC gateway for protocol conversion and for acquiring various kinds of appliance data *regularly* from appliances on the network [col 5, lines 38-42].

It would therefore be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyers' invention, with the feature of a home network system wherein the microprocessor and the at least one slave device are connected together through Power Line Communication (PLC) modems, as disclosed by Aizu, for the motivation of allowing a display terminal to acquire appliance data from each appliance regularly and complement the non-collected appliance data at the time of startup and regularly from the control device [col 2, lines 32-36].

Claim 10 is also rejected for the same reasons cited for Claim 8 given that they are identical claims that differ only by statutory category.

10. As per Claim 24, Smyers in view of Aizu discloses the method of claim 15, wherein the user automatically makes the history inquiry request by turning the power of a master device on.



While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose wherein the user automatically makes the history inquiry request by turning the power of a master device on.

The limitation is taught by Aizu in his invention of a communication system (e.g. home network system) using an electric power line and particularly relates to data collecting technology on electric household appliances in electric power line communications (PLC) at home [Abstract] [col 1, lines 5-10] [col 1, lines 46-52]. In particular, the user automatically makes the history inquiry request by turning the power of a master device on (Aizu: Col 19, lines 44-53).

It would therefore be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyers' invention, with the feature of the method wherein the user automatically makes the history inquiry request by turning the power of a master device on, as disclosed by Aizu, for the motivation of allowing a display terminal to acquire appliance data from each appliance regularly and complement the non-collected appliance data at the time of startup and regularly from the control device [col 2, lines 32-36].

11. As per Claim 30, Smyers in view of Aizu discloses the method of claim 15, wherein the steps of sending the status request signals and receiving the response signals are performed using a PLC modem.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly wherein the steps of sending the status request signals and receiving the response signals are performed using a PLC modem.

The limitation is taught by Aizu in his invention of a communication system (e.g. home network system) using an electric power line and particularly relates to data collecting technology on electric household appliances in electric power line communications (PLC) at home [Abstract] [col 1, lines 5-10] [col 1, lines 46-52]. In particular, Aizu discloses a microprocessor and a plurality of slave devices connected via a Power Line communication modem (i.e. Controller 1, which may be a PLC gateway for protocol conversion and for acquiring various kinds of appliance data *regularly* from appliances on the network [col 5, lines 38-42].

It would therefore be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Terada's invention, with the feature of wherein the steps of sending the status request signals and receiving the response signals are

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performed using a PLC modem, as disclosed by Aizu, for the motivation of allowing a display terminal to acquire appliance data from each appliance regularly and complement the non-collected appliance data at the time of startup and regularly from the control device [col 2, lines 32-36].

### ***Conclusion***

1. The Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Murakami et al  
*Remote Maintenance System*

Patent No.: US 6772096

- Natalini et al

Patent Publication No.: US 2002/0095269

*System for Monitoring and Servicing Appliances*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Glenford Madamba  
Examiner  
Art Unit 2151

## **DETAILED ACTION**

### ***Response to Remarks***

3. This action is in response to remarks filed by Applicant's representative on August 18, 2006.
4. Applicant's remarks submitted on August 18, 2006 have been considered but are now moot in light of the new grounds of rejection submitted with this action.

## **Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 1, 3, 4-6, 9, 12, 15, 18-23, 25-26, and 28-29, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Smyers, U.S. Patent US 6,430, 629.

14. As per Claims 1, 9, and 15, Smyers discloses a home network system [Abstract] [Figure 1] comprising:

at least one slave device (110-140) [Fig. 1]; and

a master device 31-36 (e.g., home network monitor\_10) [Fig. 1] operatively connected to the *at least one* slave device, the master device comprising:

a microprocessor (CPU\_20) [Fig. 1] operatively connected to the *at least one* slave device for repeatedly sending a status request signal to the slave device and receiving one or more response signals from the *at least one* slave device [Abstract] [col 2, L9-12];

a memory coupled to the microprocessor (30 /40) [Figure 1] for constructing an operation history database (e.g. log of nodal operation state or state changes) [col 2, L47 – col 3, L7] by *cumulatively* storing operation status data (e.g. temperature readings, VCR program recordings) of the *at least one* slave device included in each response signal [col 1, L5-30] [col 2, L47 – col 3, L7], wherein the microprocessor extracts data from the operation history database when a history inquiry request is received from a user [col 3, L1-20]; and

a display unit (User Interface\_160 w/ touchscreen; e.g., computer, PDA) coupled to the microprocessor for displaying the extracted operation history data [Figure 1]

wherein the operation status data includes data related to specific functions performed by the at least one slave device (e.g. temperature readings, VCR program recordings) [Abstract] [col 1, L5-30] [col 2, L47 – col 3, L7].

Claim 9 and 15 are also thus rejected using the same rationale discussed above for Claim 1 as the claims differ only by their statutory category.

15. As per Claim 3, Smyers discloses the home network system of claim 1, wherein the displayed operation history data includes a list of operations or events performed by *the* slave device during a predetermined period of time (e.g. monitoring of temperature readings every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47]

16. As per Claim 4, Smyers discloses the home network system of claim 1, wherein the history inquiry request received from the user *includes a user selection of a period of time*, and the displayed operation history data includes a list of operations or events performed by *each of the at least one slave device* during the selected period of time (e.g. monitoring of temperature readings by a temperature sensitive device every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47].

17. As per Claims 5, 19, and 20 Smyers discloses the home network system of claim 1, wherein the operation status data included in each response signal includes information indicating

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initiation or completion of an operation and a corresponding time of the initiation or completion [col 2, L48-55].

Claims 19, and 20 are also rejected using the same justification provided for Claim 5 as they cite the same claim limitations as Claim 5.

18. As per Claim 6, Smyers discloses the home network system of claim 1, wherein the master device is any one of a television (TV) receiver , a refrigerator having a display panel, a personal computer (PC), and a personal data assistant (PDA) device [col 3, L14-19].

19. As per Claim 12, 22 and 23, Smyers discloses the television (TV) receiver of claim 9, wherein the history inquiry request received from the user includes *a user selection of at least one slave device*, and the displayed operation history data includes a list of operations or events performed *by each selected slave device* during a predetermined period of time (e.g. monitoring of temperature readings by a temperature sensitive device every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47].

20. As per Claim 18, Smyers discloses the method of claim 15, wherein the operation status data included in each response signal includes data indicating a current operation status of a slave device [Abstract] [col 1, L5-28].



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21. As per Claim 21, Smyers discloses the method of claim 15, wherein the operation status data included in each response signal includes information indicating that there is no operation in progress [col 2, lines 47-65].

22. As per Claim 25, Smyers discloses the method of claim 15, wherein the user manually makes the history inquiry request by activating a corresponding function key provided within the master device [col 3, L8-20].

23. As per Claim 26, Smyers discloses the method of claim 15, wherein sending one status request signals to the plurality of slave devices is performed repeatedly (e.g. monitoring of temperature readings by a temperature sensitive device every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47].

24. As per Claims 28, 29, and 31 Smyers discloses the home network system of claim 1, wherein the at least one slave device is configured to respond to the status request signal from the master device by sending to the master device the response signal that indicates that the at least one slave device is idle (VCR 'recording', 'not recording', recording completed') [Abstract] [col 1, L5-28] [col 2, L48-55].

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2, 11, 13, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyers in view of Dara-Abrams et al (hereinafter Dara-Abrams), U.S. Patent 6826512.

14. As per Claims 2 and 16, Smyers in view of Dara-Abrams discloses the home network system of claim 1, wherein the microprocessor identifies the at least one slave device by checking *an identification (ID) of the at least one slave device*.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract], he does not expressly disclose the feature of the system wherein the microprocessor identifies the at least one slave device by checking *an identification (ID) of the at least one slave device*. The feature is disclosed by Dara-Abrams in a related endeavor.

Dara-Abrams discloses as his invention a method and apparatus for diagnosing consumer electronic devices (PCs, TVs, PVRs, STBs, DVRs, PDAs, game devices, etc.) [Abstract] [col 1, L14-22] [col 2, L35-36]. In one embodiment, when a problem with a consumer device owned by a user is identified, a diagnostic procedure is provided to control the diagnosis of the potentially

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faulty consumer electronic device by a testing consumer electronic device. In particular, Dara-Abrams discloses as part of his invention that upon receiving a request for a support service application, server\_22 selects the requested service application from the database\_24 using *device identifying information* (e.g. the vendor, model number and serial number of the device) included in the request [col 3, L46-50].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyer's invention with the feature of the system wherein the microprocessor identifies the at least one slave device by checking *an identification (ID) of the at least one slave device*, as disclosed by Dara-Abrams, for the motivation of providing a mechanism for diagnosing consumer electronic devices locally, thus eliminating a need to find a service center associated with the faulty device [col 1, L42-45].

15. As per Claims 11 and 17, Smyers in view of Dara-Abrams discloses the television (TV) receiver of claim 9, wherein the displayed operation history data includes a list of operations or events performed by one or more of the plurality of *slave devices* during a predetermined period of time.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose the feature of the television (TV) receiver. The feature is disclosed by Dara-Abrams in a related endeavor.

Dara-Abrams discloses as his invention a method and apparatus for diagnosing consumer electronic devices (PCs, TVs, PVRs, STBs, DVRs, PDAs, game devices, etc.) [Abstract] [col 1, L14-22] [col 2, L35-36]. In one embodiment, when a problem with a consumer device owned by a user is identified, a diagnostic procedure is provided to control the diagnosis of the potentially faulty consumer electronic device by a testing consumer electronic device. In particular, Dara-Abrams discloses as part of his invention gateway device\_14 (e.g., PC, laptop, PDA, etc.), which may be coupled to a display device\_42, such as a television [col 3, L51-60].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyer's invention with the feature of the television (TV) receiver, as disclosed by Dara-Abrams, for the motivation of providing a mechanism for diagnosing consumer electronic devices locally, thus eliminating a need to find a service center associated with the faulty device [col 1, L42-45].

Claim 17 is also rejected using the same justification provided for Claim 11 as they cite the same claim limitations.

16. As per Claim 13, Smyers in view of Dara-Abrams discloses the television (TV) receiver of claim 9, wherein the history inquiry request received from the user includes *a user selection of a period of time*, and the displayed operation history data includes a list of operations or events performed *by each slave device* during the selected period of time.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose the feature of the television (TV) receiver. The feature is disclosed by Dara-Abrams in a related endeavor.

Dara-Abrams discloses as his invention a method and apparatus for diagnosing consumer electronic devices (PCs, TVs, PVRs, STBs, DVRs, PDAs, game devices, etc.) [Abstract] [col 1, L14-22] [col 2, L35-36]. In one embodiment, when a problem with a consumer device owned by a user is identified, a diagnostic procedure is provided to control the diagnosis of the potentially faulty consumer electronic device by a testing consumer electronic device. In particular, Dara-Abrams discloses as part of his invention gateway device\_14 (e.g., PC, laptop, PDA, etc.), which may be coupled to a display device\_42, such as a television [col 3, L51-60].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyer's invention with the feature of the television (TV) receiver, as disclosed by Dara-Abrams, for the motivation of providing a mechanism for diagnosing consumer electronic devices locally, thus eliminating a need to find a service center associated with the faulty device [col 1, L42-45].

Claim 13 is also rejected using the citations and reasoning provided above for claim 12 as the limitation of the history inquiry request received from the user including *a user selection of at least one slave device*, and the displayed operation history data including a list of operations or events performed *by each selected slave device* during a predetermined period of time, is disclosed by Smyers (e.g. monitoring of temperature readings by a temperature sensitive device every 30 minutes, monitoring of STB / VCR states performed every 5 minutes) [col 2, L23-47]

17. Claims 7, 14, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyers in view of Klosterman et al (hereinafter Klosterman), U.S. Patent Publication US 200/0092017A1.

18. As per Claim 7, Smyers in view of Klosterman discloses the home network system of claim 1, wherein the master device includes a capability to activate a message BLOCK function which prevents messages sent from the at least one slave device from being displayed, and

wherein the memory *cumulatively* stores the operation status data included in each response signal, regardless of whether a message BLOCK function of the master device is currently activated or not.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose wherein the master device includes a capability to activate a message BLOCK function which prevents messages sent from the at least one slave device from being displayed, and wherein the memory *cumulatively* stores the operation status data included in each response signal, regardless of whether a message BLOCK function of the master device is currently activated or not.

This limitation is taught by Klosterman in his invention relating to television systems, and in particular, to the interception of television programming signals tuned by a television and the replacement or overlay of said tuned television programming signals with alternative video and/or audio programming and/or with graphics and/or text [0002]. In particular, Klosterman discloses an audio blocking bit (ABB) or video blocking bit (VBB) wherein a user may activate an electronic program guide. The EPG checks the VBB of the channel table entry of the channel currently tuned, and in one embodiment, if the VBB channel is set "on" then the EPG display is adjusted to completely cover the screen, and the show being viewed or displayed is completely blocked out [0061] [Figs. 2a-b, 3, 4a-b]. It is noted here by the Examiner that Klosterman's disclosures allow television programming signals to be received or stored in the receiver device while the display of the signal is blocked from view or replaced with alternative graphics and/or text.

It would therefore be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyers' invention, with the feature of a master device that includes a capability to activate a message BLOCK function which prevents messages sent from the at least on slave device from being displayed, and wherein the memory *cumulatively* stores the operation status data included in each response signal, regardless of whether a message BLOCK function of the master device is currently activated or not, as disclosed by Klosterman, for the motivation of blocking out undesired or unwanted television signal programs (i.e., commercials and advertisements) according to viewer preferences [0003-0006].

Claims 14 and 27 are also rejected using the same rationale for Claim 7 given that they are identical claims that differ only by statutory category.

19. Claims 8, 10, 24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyers in view of Aizu et al (hereinafter Aizu), U.S. Patent US 6,838,978.

20. As per Claims 8 and 10, Smyers in view of Aizu notes the home network system of claim 1, wherein the microprocessor and the at least one slave device are connected together through Power Line Communication (PLC) modems.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose wherein the microprocessor and the at least one



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slave device are connected together through Power Line Communication (PLC) modems 1 (Aizu: Figure 1; Col 5, lines 38-42).

The limitation is taught by Aizu in his invention of a communication system (e.g. home network system) using an electric power line and particularly relates to data collecting technology on electric household appliances in electric power line communications (PLC) at home [Abstract] [col 1, lines 5-10] [col 1, lines 46-52]. In particular, Aizu discloses a microprocessor and a plurality of slave devices connected via a Power Line communication modem (i.e. Controller 1, which may be a PLC gateway for protocol conversion and for acquiring various kinds of appliance data *regularly* from appliances on the network [col 5, lines 38-42]).

It would therefore be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyers' invention, with the feature of a home network system wherein the microprocessor and the at least one slave device are connected together through Power Line Communication (PLC) modems, as disclosed by Aizu, for the motivation of allowing a display terminal to acquire appliance data from each appliance regularly and complement the non-collected appliance data at the time of startup and regularly from the control device [col 2, lines 32-36].

Claim 10 is also rejected for the same reasons cited for Claim 8 given that they are identical claims that differ only by statutory category.

21. As per Claim 24, Smyers in view of Aizu discloses the method of claim 15, wherein the user automatically makes the history inquiry request by turning the power of a master device on.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly disclose wherein the user automatically makes the history inquiry request by turning the power of a master device on.

The limitation is taught by Aizu in his invention of a communication system (e.g. home network system) using an electric power line and particularly relates to data collecting technology on electric household appliances in electric power line communications (PLC) at home [Abstract] [col 1, lines 5-10] [col 1, lines 46-52]. In particular, the user automatically makes the history inquiry request by turning the power of a master device on (Aizu: Col 19, lines 44-53).

It would therefore be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Smyers' invention, with the feature of the method wherein the user automatically makes the history inquiry request by turning the power of a master device on, as disclosed by Aizu, for the motivation of allowing a display terminal to acquire appliance data from each appliance regularly and complement the non-collected appliance data at the time of startup and regularly from the control device [col 2, lines 32-36].

22. As per Claim 30, Smyers in view of Aizu discloses the method of claim 15, wherein the steps of sending the status request signals and receiving the response signals are performed using a PLC modem.

While Smyers discloses substantial features of the invention such as the home network system of claim 1 [Abstract] and displaying operation history data (Log of nodal operational state changes), he does not expressly wherein the steps of sending the status request signals and receiving the response signals are performed using a PLC modem.

The limitation is taught by Aizu in his invention of a communication system (e.g. home network system) using an electric power line and particularly relates to data collecting technology on electric household appliances in electric power line communications (PLC) at home [Abstract] [col 1, lines 5-10] [col 1, lines 46-52]. In particular, Aizu discloses a microprocessor and a plurality of slave devices connected via a Power Line communication modem (i.e. Controller 1, which may be a PLC gateway for protocol conversion and for acquiring various kinds of appliance data *regularly* from appliances on the network [col 5, lines 38-42].

It would therefore be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Terada's invention, with the feature of wherein the steps of sending the status request signals and receiving the response signals are performed using a PLC

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modem, as disclosed by Aizu, for the motivation of allowing a display terminal to acquire appliance data from each appliance regularly and complement the non-collected appliance data at the time of startup and regularly from the control device [col 2, lines 32-36].

### ***Conclusion***

4. The Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Murakami et al  
*Remote Maintenance System*

Patent No.: US 6772096

- Natalini et al  
*System for Monitoring and Servicing Appliances*

Patent Publication No.: US 2002/0095269

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Glenford Madamba  
Examiner  
Art Unit 2151



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